03040205-150

(Black River)

General Description

Watershed 03040205-150 is located in Williamsburg and Georgetown Counties and consists primarily of the *Black River* and its tributaries from an unnamed tributary near the S.C. Hwy. 30 crossing to Black Mingo Creek. The watershed occupies 140,788 acres of the Lower Coastal Plain region of South Carolina. The predominant soil types consist of an association of the Yemassee-Yauhannah-Bladen-Wahee series. The erodibility of the soil (K) averages 0.16; the slope of the terrain averages 1%, with a range of 0-2%. Land use/land cover in the watershed includes: 55.6% forested land, 17.9% forested wetland (swamp), 13.7% agricultural land, 10.7% scrub/shrub land, 0.9% nonforested wetland (marsh), 0.8% urban land, and 0.4% water.

This section of the Black River accepts drainage from its upper reaches, together with Spring Branch, Spring Gully, Jumping Gully, Thompson Swamp, Birch Creek (Dobson Branch, Dobson Bay), and Gin Branch. Flat Swamp (Camp Pond Bay, Ricefield Bay, Alligator Bay, Log Branch) flows into Johnsons Swamp (Oakridge Bay, Mill Branch, Murray Swamp, Sportsman Pond), which in turn flows into Horse Pen Swamp before draining into the Black River downstream of Gin Branch. Further downstream, Big Dam Swamp (Roper Branch, Sleeper Branch, Cedar Patch Branch, Brightman Swamp) enters the river followed by Lester Creek, Puncheon Creek, and Indian Hut Swamp. There are 169.0 stream miles in this watershed and several ponds totaling 81.7 acres. The Black River is classified FW* (Dissolved oxygen not less than 4.0 mg/l and pH between 5.0 and 8.0) and the remaining streams in the watershed are classified FW.

Water Quality

Station #	<u>Type</u>	<u>Class</u>	<u>Description</u>
PD-359	W	FW*	BLACK RIVER AT S-45-30
PD-170	P	FW*	BLACK RIVER AT SC 51 11.6 MILES NE OF ANDREWS

Black River - There are two monitoring sites along this section of the Black River. Aquatic life and recreational uses are fully supported at the upstream site **(PD-359)**. Station **PD-359** is physically located in this watershed, but also reflects the influence of drainage from upstream watershed 03040205-140.

Aquatic life uses are not supported at the downstream site (**PD-170**) due to occurrences of zinc in excess of the aquatic life acute standards, compounded by a significant increasing trend in turbidity. There was also a very high concentration of chromium measured in 1998. There is a significant increasing trend in pH. Significant decreasing trends in five-day biochemical oxygen demand and total nitrogen concentration suggest improving conditions for these parameters. The pesticide endrin was detected in the 1995 sediment sample. Recreational uses are fully supported; however, there is a significant increasing trend in fecal coliform bacteria concentration.

The Black River was treat with aquatic herbicides from 1992-1995 to remove aquatic plants from boat ramp areas. The treatments were successful and no additional treatments have been necessary.

A fish consumption advisory has been issued by the Department for mercury and includes the Black River within this watershed (see advisory p. 73).

NPDES Program

Active NPDES Facilities

RECEIVING STREAM
FACILITY NAME
PERMITTED FLOW @ PIPE (MGD)
COMMENT

NPDES#
TYPE
LIMITATION

BLACK RIVER SC0025135
TOWN OF ANDREWS WWTP MAJOR DOMESTIC
PIPE #: 002 FLOW: 2.0/2.5 WATER QUALITY
PIPE #: 003 FLOW: 2.0/2.5 WATER QUALITY
WQL FOR DO,TRC,NH3N,BOD5

BLACK RIVER TRIBUTARY SCG730006

STONE CONSTRUCTION CO. PIT

MINOR INDUSTRIAL

PIPE #: 001 FLOW: M/R EFFLUENT

LESTER CREEK SC0025135

TOWN OF ANDREWS WWTP
PIPE #: 001 FLOW: 2.0/2.5
WATER QUALITY
WQL FOR DO,TRC,NH3N,BOD5

INDIAN HUT SWAMP SC0046582

INTERNATIONAL PAPER, INC./SAMPIT LUMBER MILL MINOR INDUSTRIAL PIPE #: 001 FLOW: 0.34 WATER QUALITY

WQL FOR TRC,NH3N

JOHNSONS SWAMP SC0001619

ELF ATOCHEM NORTH AMERICA/ANDREWS MINOR INDUSTRIAL PIPE #: 001 FLOW: 0.213 WATER QUALITY WQL FOR DO,TRC,NH3N,BOD5

Nonpoint Source Management Program

Land Disposal Activities

Landfill Facilities

LANDFILL NAME
FACILITY TYPE

PERMIT #
STATUS

ANDREWS WIRE LANDFILL IWP-140 INDUSTRIAL ------

ANDREWS WIRE LANDFILL IWP-164
INDUSTRIAL -------

Mining Activities MINING COMPANY MINE NAME

PERMIT #
MINERAL

STONE CONSTRUCTION CO. ANDREWS MINE

0598-89 SAND

Water Supply

Portions of this watershed fall within the Waccamaw Capacity Use Area and large groundwater uses must be reported (see Capacity Use Program p.23).

Growth Potential

The Town of Andrews is located in this watershed, and has both water and sewer infrastructure and a rail line which should allow low to moderate growth. Outside of the Andrews area, the watershed is rural with mostly agricultural and timberland uses.